Loop-the-Loop

Estimated Time for Activity: ~5 minutes

Optional Objectives:
The students will:

• Gain insight into concepts of energy and conservation thereof
• Gain understanding in circular motion

Materials:

• Loop-the-loop
• Metal ball bearing

Optional Vocabulary:

• Conservation of energy
• Kinetic energy
• Potential energy
• Centripetal acceleration

Procedures:

• Start the ball at the long gentle sloped side of the loop-the-loop, and let the ball go.
• Now, start the ball at the other side and notice it cannot make it around the loop.

Optional Post-Activity Question(s):

• Why could the ball make it from one way but not the other?
• What kept the ball on the track in the loop?